

# From Panic to Planning

Unpacking the policy toolbox to anticipate migration trends

Panel: Early Warning and Risk Analysis

16 June 2017, OECD Paris, France

Dennis King

Humanitarian Affairs Analyst

US Department of State

Washington DC , USA

# Predictions in the Media

## Battle for Mosul: 1 Million Could Be driven From Their Homes

SHARE  
f Share  
t Tweet  
e Email  
p Print

by ALASTAIR JAMIESON



► Iraqi forces backed by US troops attack ISIS stronghold to liberate Mosul 2:16

LONDON — Up to one million civilians face being driven from their homes and others could be used as human shields or even gassed in the battle for Mosul, aid groups warned Monday as the military operation began.

The United Nations said it was braced for the biggest and most complex

## Mosul Dam could collapse any minute killing 1.5 million people



An employee works on strengthening the Mosul Dam on the Tigris River, north of the Iraqi city of Mosul, on February 1, 2016. AP/Getty Images

## We predicted Burundi's crisis. Is the response working?

By Cameron Hudson June 12, 2015



## Climate migrants could dwarf other refugee flows: experts

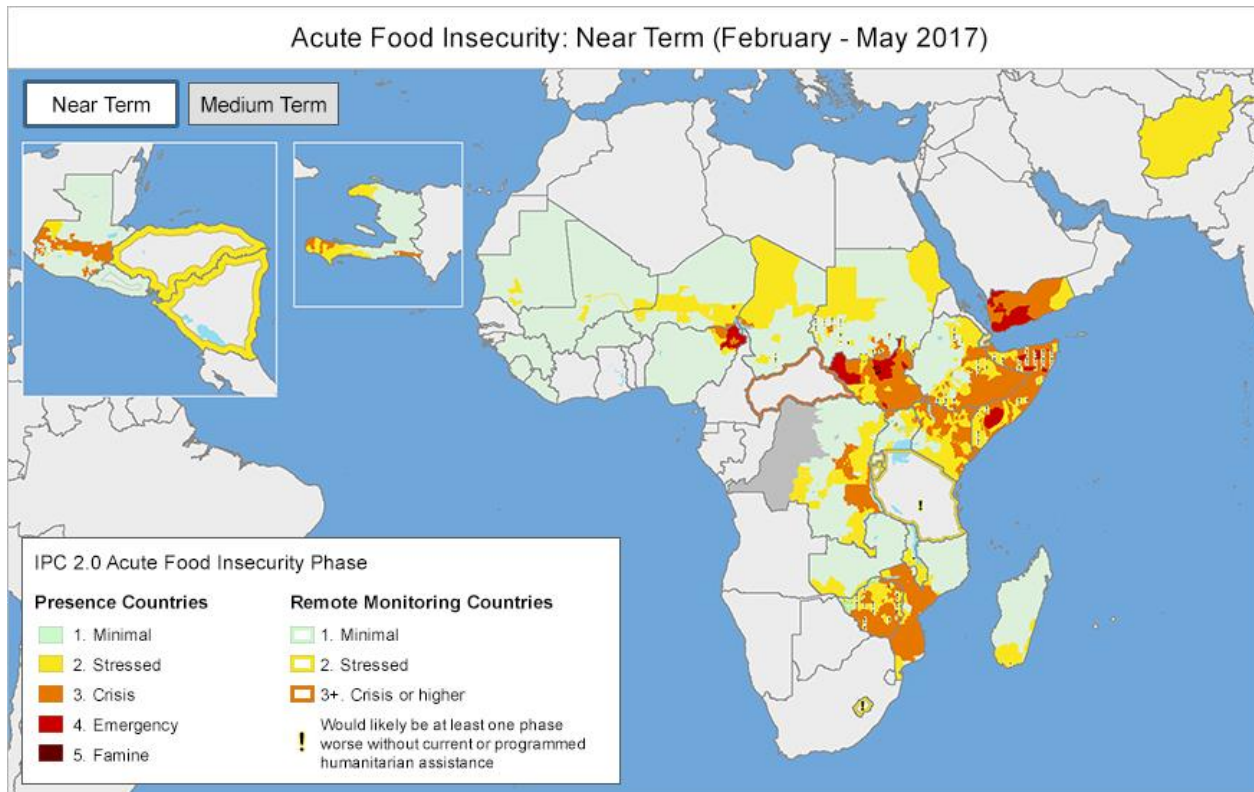
[Reuters](#) Business Insider  
Dec. 10, 2015, 5:34 PM

# Types of Early warning and risk analysis forecasting

- Early Warning/Alert Systems
- Big Data Predictive Analysis Modeling
- Scenario Risk Analysis
- Delphi Collaborative Analysis
- Contingency planning exercises

# Early Warning/Alert Systems

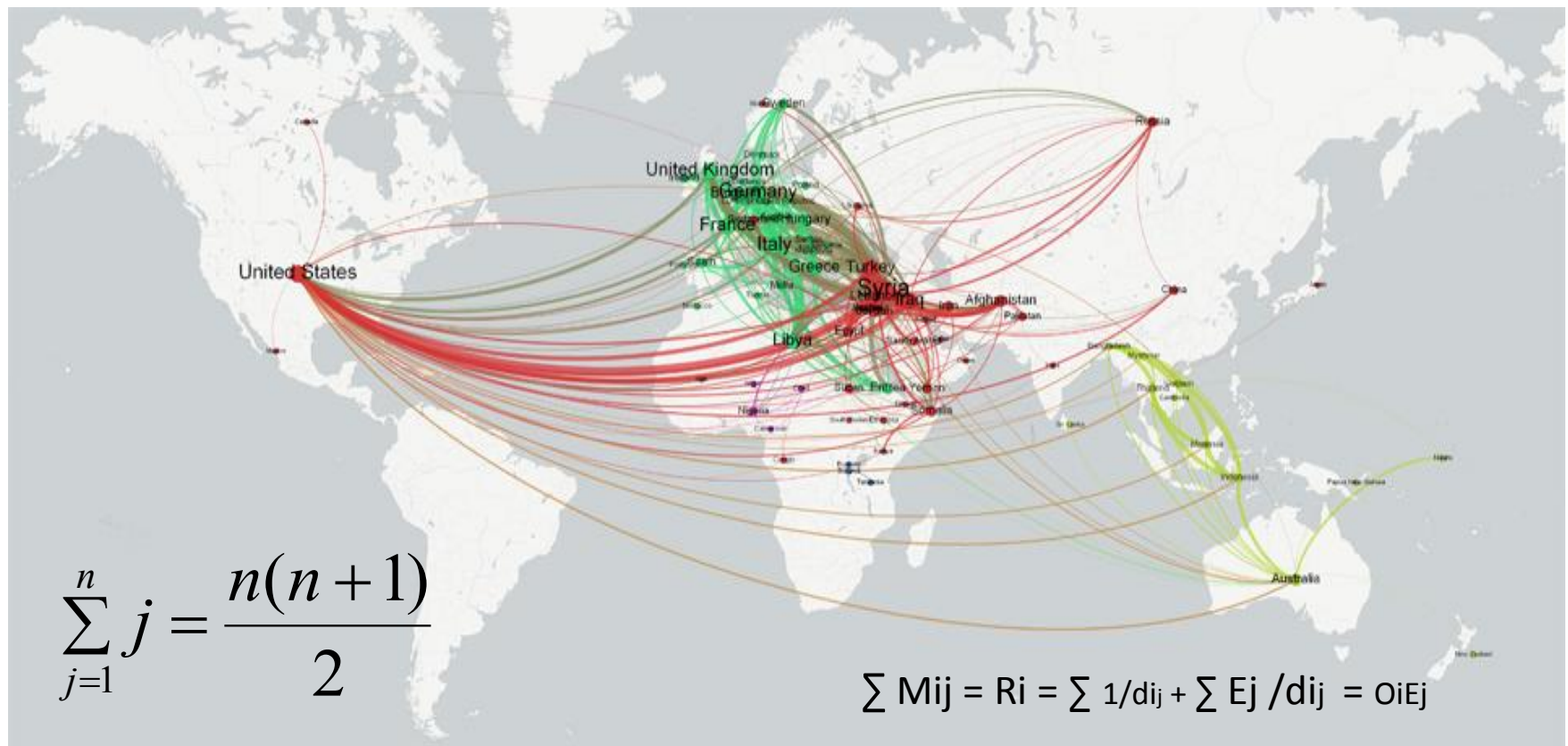
Color-coded risk/vulnerability rankings/gauge – red, orange, yellow, green categories



# Predictive Big Data Analytics

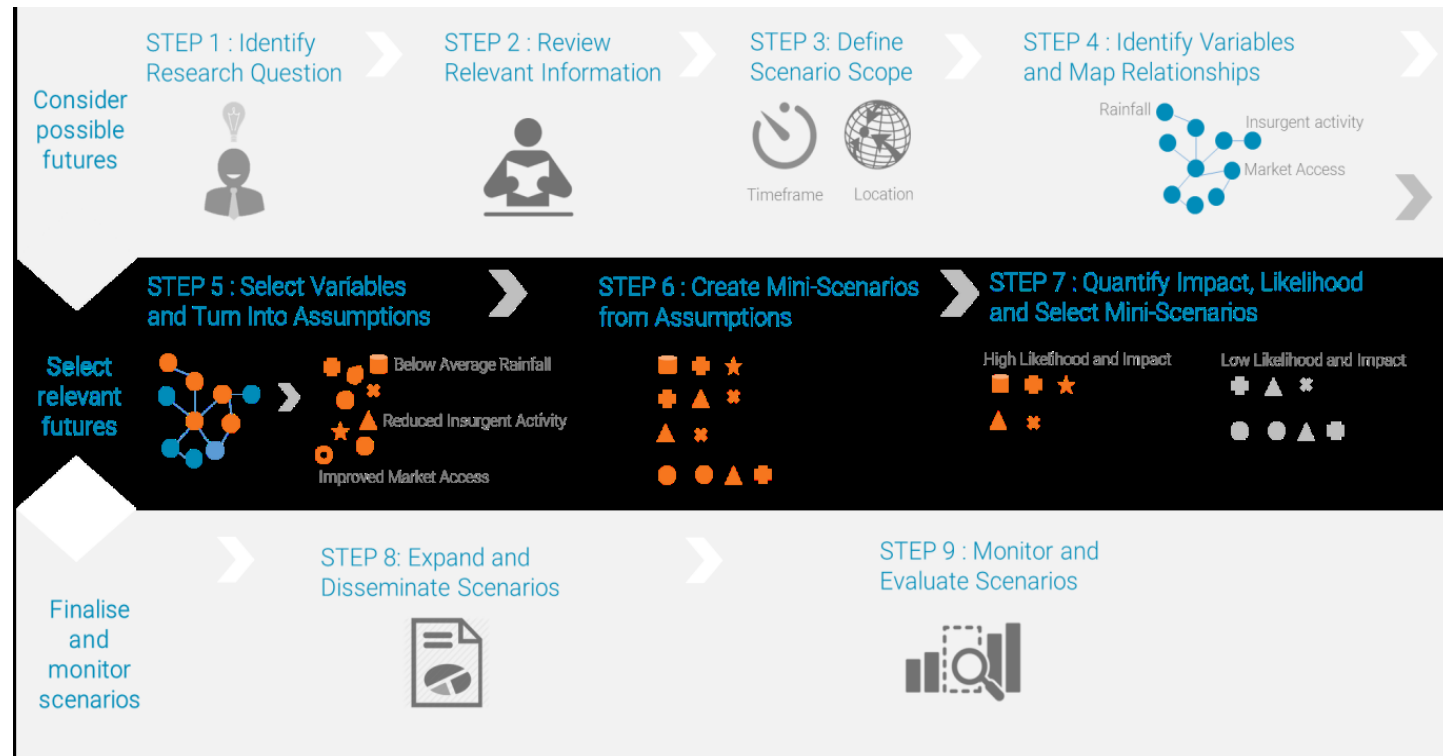
GDELT Project

Mapping the Geographic Networks of Global Refugee Flows



# Scenario Analysis

## ACAPS scenario analysis approach

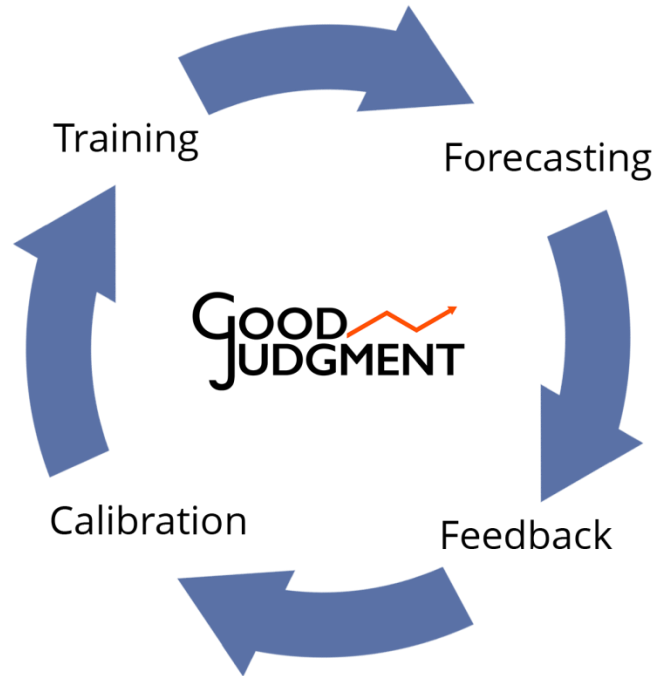


|                                |  |                           |                   |
|--------------------------------|--|---------------------------|-------------------|
| ACAPS Scenario 1<br>April 2017 | Slight increase in migration             | 3 out of 5<br>Probability | 4 out of 5 Impact |
| ACAPS Scenario 2<br>April 2017 | Large increase in migration/readmissions | 3 out of 5<br>Probability | 5 out of 5 impact |
| ACAPS Scenario 3<br>April 2017 | Enforced closure of Mediterranean route  | 2 out of 5<br>Probability | 5 out of 5 impact |
| ACAPS Scenario 4<br>April 2017 | Improved security in Libya               | 1 out of 5<br>Probability | 2 out of 5 impact |

# Delphi/Collaborative Analysis

## Crowdsourced forecasting

*Good Judgment project - evidence-based techniques to improve forecasting accuracy combine the power of competition and collaboration. – Philip E. Tetlock*







# Contingency Planning Exercise

## OPERATION PLAN VIGILANT SENTRY (OVS)



An inter-agency US Government comprehensive, integrated national plan for mass migration in the Caribbean

- Protect Safety of life at sea and deter/dissuade mass migration up to 100K migrants.
- OVS provides guidance for four broad activities:
  - 1. Indications and warnings
  - 2. Deter and dissuade
  - 3. At sea Rescue and interdiction ops
  - 4. Migrant processing, protection, shelter
  - 5. Strategic Messaging
- Repatriation or other alternatives





# Key Questions

- Why – what are the Triggers and Drivers?
- What are the various scenarios and impacts?
  - When and how long (duration)?
  - How many will be affected and displaced?
  - Who/which groups will flee?
  - Where will they go?
  - What are the potential wildcards/unintended consequences?
- What are the probabilities/confidence levels for each scenario?

# Why – what will generate mass migration/displacement?

Triggers – quick onset events

Drivers – longer-term conditions

# Triggers

- Military offensives/sieges – Mosul & Aleppo 2016, Sri Lanka 2009
  - Mass civilian violence – Rwanda 1994, Kenya post-election violence 2007 – 2008
  - Political Crisis – Burundi 2015
  - Government expulsions – Cuba Mariel boatlift 1980, Nigeria expulsions 1985
  - Repatriation of refugees – Pakistan to Afghanistan, Kenya to Somalia
- 
- Fast-onset natural disaster (earthquake, storm, flood) Pakistan FL 2010 , Haiti EQ 2010
  - Mass casualty incident – accident (dam collapse, chemical/nuclear incident), terrorist attack

# Drivers

- Long-term conflict – Syria, South Sudan, DRC, etc.
- Demographic displacement/ethnic cleansing – Former Yugoslavia – mid-1990s, Darfur 2004
- Mass civilian violence – Central America/northern triangle violence – unaccompanied minors 2014-15
- Pressure/Escape valves and magnets – 2015 Europe migration crisis
- Slow-onset disaster - Drought/disruption of livelihoods, agricultural production, food insecurity
- Economic crisis/collapse
- Climatic/environmental displacement - 1998 El Nino (China, India, Central America)
- Epidemic/disease panic – West Africa Ebola 2014-15

## Selected Major Events of mass, relatively rapid displacements and migrations

| What?                                      | When/How Long                | How many displaced? Who?               | Where to?                    | Why?  |
|--|------------------------------|--|------------------------------|---|
| Cuba Mariel boatlift                       | 15 April and 31 October 1980 | 125,000 migrants                       | Cuba to Florida USA          | Government expulsion  |
| Rwanda genocide                            | April to July 1994           | 2,000,000 IDPs and refugees            | Rwanda to DRC                | Mass atrocity/ethnic cleansing                                |
| Darfur Sudan                               | 2003 – 2004                  | 2,500,000 IDPs and refugees            | Sudan to Chad                | Mass atrocity/ethnic cleansing                                |
| Sri Lanka                                  | Jan – May 2009               | 350,000 IDPs                           | NE Sri Lanka                 | Military offensive  |
| Haiti                                      | Jan – Jun 2010               | 500,000 + 50,000 + 4,000 migrants      | To DR, USA and Brazil        | Earthquake  |
| Japan earthquake tsunami, nuclear incident | March 2011                   | 470,000 displaced or evacuated         | Japan                        | Natural disasters and nuclear accident                        |
| Central America                            | 2014 – Feb 2015              | 70,000 – 105,000 Accompanied/UA Minors | US Border                    | Criminal Violence in Honduras, Guatemala, El Salvador, Mexico |
| Mosul, Iraq                                | Oct 2016 – May 2017          | 380,000 to 500,000 IDPs                | Mosul city to south and east | Military offensive  |

# Dilemmas

Cassandra and the Boy who cried wolf

Self-defeating/self-fulfilling warnings

“black swans”/unexpected triggers

Boiling frog phenomenon

Data Uncertainty

Quantitative vs. Qualitative

# Lessons Learned

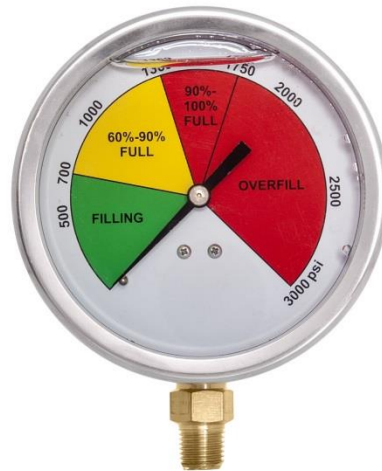
- Usually, mass displacement and migration flows are caused by a combination of triggers and drivers ie. conflict, food insecurity, pressure escape values, etc.
- Forecasting can be considered risky to the reputation/careers of both the analysts and the decision-makers - if acted upon (self-defeating, difficult to prove a negative) or not acted upon (I told you so).
- Analysts and forecasters are often not connected to humanitarian decision makers as trusted sources of information or advisors. Decision makers need to be involved and invested in the forecasting process.
- Scientific evidence-based and data-driven forecasting often do not incorporate the valued knowledge and insight of those with field experience/humanitarian expertise and
- Field experts/forecasters often do not incorporate scientific evidence-based and data-driven forecasting techniques that provide objectivity and alternative analysis.



# Questions?



Cassandra



Oracle of Delphi

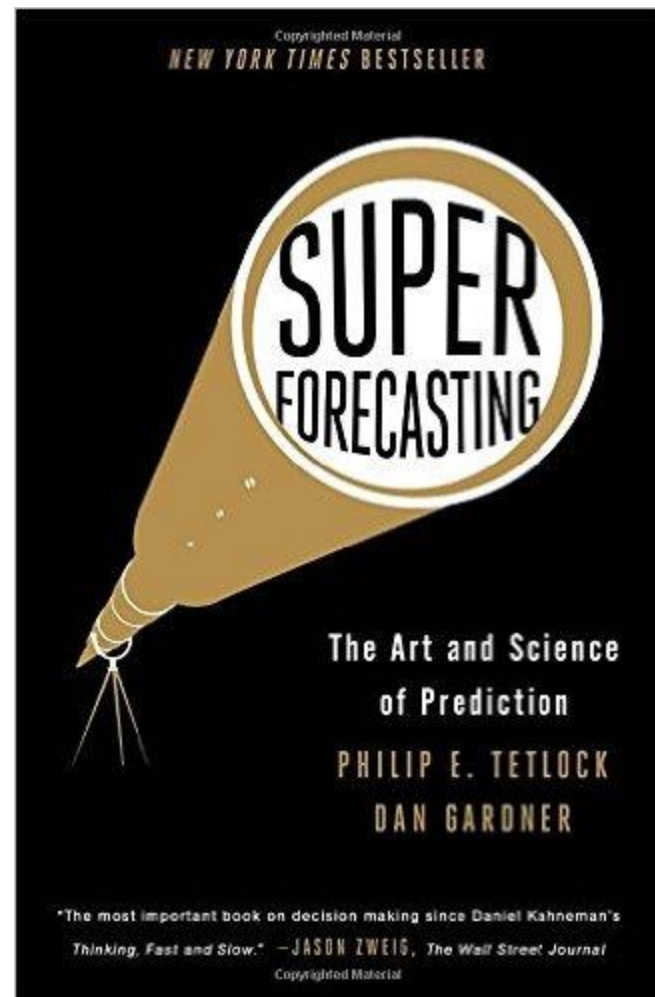
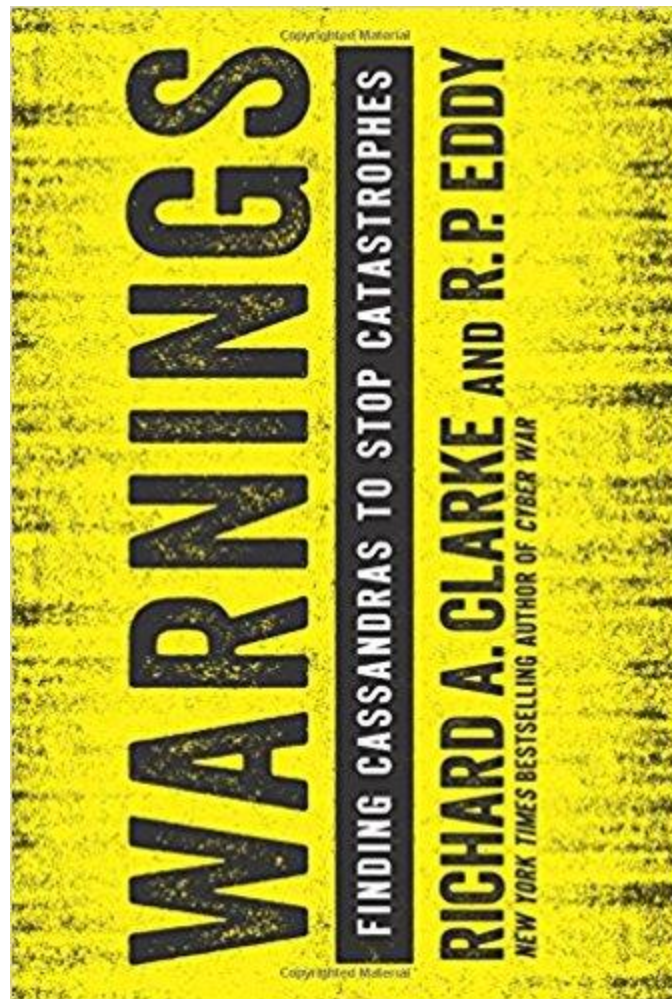




#49277222

Dennis King  
Kingdj2@state.gov





# Additional Reading

## **Migration trends to watch in 2017**

Kristy Siegfried, IRIN December 21, 2016

<https://www.irinnews.org/analysis/2016/12/21/migration-trends-watch-2017>

## **MODELLING REFUGEE ARRIVALS IN EUROPE**

<https://www.centre4innovation.org/innovation-works/explore-our-prototypes/modelling-refugee-arrivals-in-europe>

## **The Refugee Crisis – We Should Have Known**

Rachel Potts, Humanitarian Coalition Relief to Recovery 6 November 2015

<http://innovatedevelopment.org/2015/11/06/the-refugee-crisis-we-should-have-known>

## **Forecasting Displacement: A Brand New Effort Using Big Data**

[Elizabeth Ferris](#) Thursday, June 5, 2014

<https://www.brookings.edu/blog/techtank/2014/06/05/forecasting-displacement-a-brand-new-effort-using-big-data/>

## **Early Warning Project - US Holocaust Memorial Museum**

<https://www.ushmm.org/confront-genocide/how-to-prevent-genocide/early-warning-project>

## **Paul Currion - Beating Hindsight: Forecasting for Humanitarian Planning and Preparedness**

<https://medium.com/@paulcurrion/beating-hindsight-forecasting-for-humanitarian-planning-and-preparedness-d720ec56644b>